S E R V I C E   N O T E

SUPERSEDES: 3589A-01

3589A Spectrum/Network Analyzer

Serial Numbers: 3129A00100 / 3343A00626

3589A firmware revision history

Parts Required:

Part No.	Qty.	Description
03589-84404	1	Firmware upgrade kit

Situation:

The A.00.02 firmware upgrade resolves the following defects:
- FFT state recall gives single loop LO
- Reading real time clock may hang instrument
- Source trip may cause erroneous LO UNLOCK message
- Marker function target search fails to find target at edges of screen.
- Group delay wrong on trace B when both traces are set to input group delay.

The A.00.03 firmware upgrade resolves the following defects:
- Network calibration traces can be saved via GPIB commands.
- Incorrect offset marker data displayed when switching between linear and log trace types.

Continued

DATE: 10 March 1994

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION AVAILABLE

ACTION CATEGORY:	**AGREEABLE TIME**	■ PERFORMANCE ENHANCEMENT ☐ SERVICE/RELIABILITY ENHANCEMENT
LOCATION CATEGORY:	■ CUSTOMER INSTALLABLE ☐ ON-SITE ☐ SERVICE CENTER	AVAILABLE UNTIL: 15 March 1996
AUTHOR: DWH	ENTITY: A100	ADDITIONAL INFORMATION:

Agilent Technologies

Solution/Action:
Install the firmware using the firmware update disks.

The firmware installation procedure for the 3589A is straightforward. The 3589A is equipped with reprogrammable operating firmware. Here is the procedure:

Step 1: Determine if the instrument needs the firmware update.
 1. Set the power switch to ON.
 2. After the analyzer finishes its power-up calibration routine, press the following keys:
      [Special Fctn]
      [NON-VOL SETUP]
      [VERSION]
 3. If the information block reads "Release ID: A.00.03", you do not need to update the instruments firmware.

The information block appears on the screen for about five seconds (pressing [VER-SION] repeats the information).

Step 2: Power on instrument with disk 1 in disk drive.
 1. Set the power switch to STANDBY.
 2. Insert disk 1 into the internal disk drive.
 3. Set the power switch to ON.
 4. Wait until the instrument displays: "Remove disc and cycle power to continue."
 5. Remove disk 1 and set the power switch to STANDBY.

After the power-on tests are finished, the instrument automatically searches for a flexible disk containing the instrument firmware. When these files are located, they are loaded into memory which reprograms into the operating firmware.

Step 3: Power on instrument with disk 2 in disk drive
 1. Insert disk 2 into the internal disk drive.
 2. Set the power switch to ON.
 3. Wait until the instrument displays: "Remove disc 2 and turn off instrument power."
 4. Remove disk 2 and set the power switch to STANDBY.

The "Program ROM" power-on tests may fail because the first disk only reprogrammed half of the instrument's operating firmware. Here is the failure message you may see:
ROM Checksum Failure.   Bad Checksum.   04,   0
ROM Checksum Failure.   Bad Checksum.   04,   1

This message should be ignored until the firmware upgrade is complete.

Step 4: Power on instrument and check for failures.
  1. Set the power switch to ON.
  2. Check that the power-on tests finished with no failures.

If the instrument does not boot up or the power-on tests fail, check that you inserted the disks in the correct order. Repeat the installation procedure, inserting disk 1 first and disk 2 second.

If the instrument fails after repeating the installation procedure, refer to the 3589A Service Guide for service information.